

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (previously presented) An isolated mite protein comprising amino acids 1-83 of the sequence disclosed in SEQ ID NO. 2.

2-3. (canceled)

4. (previously presented) An isolated nucleic acid encoding a protein according to claim 1.

5. (canceled)

6. (currently amended) An isolated nucleic acid which hybridizes specifically under stringent conditions to a nucleic acid according to claim 4, wherein said stringent conditions are characterized by a salt concentration less than about 1.0 M Na ion, at a pH of 7.0 to about 8.3 and the temperature is at least about 30°C, and wherein said isolated nucleic acid encodes for a mite protein antigen.

7. (previously presented) An expression vector which comprises a nucleic acid according to claim 4.

8-9. (canceled)

10. (previously presented) An isolated antibody raised against a protein according to claim 1.

11. (previously presented) The isolated antibody according to claim 10, wherein said antibody is a monoclonal antibody.

12-13. (canceled)

14. (currently amended) A method for screening a protein for treating a disease associated with mites according to claim 1, ~~or a peptide which exhibits antigenic properties essentially equivalent to said protein~~ comprising the steps of

- (a) producing a multiplicity of sample peptides and
- (b) selecting a sample peptide with ~~substantially~~ the same structure ~~[[to]] as said protein or peptide which exhibits antigenic properties essentially equivalent to said protein,~~ and evaluating the properties of said peptide as an antigen of *Sarcoptes scabiei*.

15. (previously presented) The method according to claim 14, wherein peptides comprise the amino acid sequence disclosed in SEQ ID NO. 3.

16. (canceled)

17. (previously presented) A method of making an immunogenic preparation, comprising adding the protein according to claim 1 to a pharmaceutically and/or veterinary acceptable carrier.

18. (currently amended) An immunogenic preparation comprising a protein ~~according to claim 1~~ consisting of amino

acids 1-83 of SEQ ID. NO. 2 and a pharmaceutically and/or veterinary acceptable carrier.

19. (previously presented) The immunogenic preparation according to claim 18, wherein said immunogenic preparation is in a unit dosage form.

20. (previously presented) A method for treating a disease associated with mites in a subject having a disease associated with mites or at risk of developing a disease associated with mites, comprising administering an effective amount of a preparation according to claim 18 to said subject in need thereof.

21. (previously presented) The method according to claim 20, wherein the subject suffers from sarcoptes mange or scabies.

22. (previously presented) A method for the diagnosis of a mite associated disease comprising the steps of

- a) immobilizing a protein according to claim 1;
- b) providing a sample suspected of being infected with said mite associated disease;
- c) incubating said sample with said immobilized protein; and
- d) detecting any antibody bound to the immobilized antigen and thus specific for said mite associated disease; whereby a conclusion regarding the diagnosed condition is obtained.

23. (original) A method according to claim 22, wherein the mite associated disease is sarcoptic mange or scabies.

24. (previously presented) A kit for performing the method according to claim 23.

25. (previously presented) An isolated host cell comprising a vector according to claim 7.

26. (previously presented) A method of producing a protein, comprising the steps:

- a) providing a DNA according to claim 4;
- b) introducing said DNA in an expression vector;
- c) inserting said vector into a suitable host cell;
- d) culturing said host cell to obtain the desired protein product; and optionally
- e) purifying the protein or peptide produced.

27. (canceled)

28. (new) An immunogenic preparation comprising a protein according to claim 1 and a pharmaceutically and/or veterinary acceptable carrier.

29. (new) A peptide consisting of amino acids 1-83 of SEQ ID NO. 2.

30. (new) An isolated nucleic acid encoding for a protein according to claim 29.